

***Rejections Under 35 U.S.C. §102***

In the Office Action, claims 1, 2, 4-7, 10-14, 18, 19 and 22 have been rejected under 35 U.S.C. §102(e) for being anticipated by U. S. Patent No. 6,009,336 issued to Harris, *et al.* (“Harris”). This rejection is respectfully traversed.

Independent claim 1 recites “A *digital still camera* capable of telecommunication comprising: ... a modifying unit which modifies said electromagnetic signal into a digital electronic signal *indicative of a still image*; and a device which alternatively displays *a still image* on the basis of the digital electronic signal from the converting device or from the modifying unit”.

For example, Fig. 2 of the present application shows a digital still camera comprises a CCD camera 10 (claimed converting device) that converts an optical image into a digital electronic signal *indicative of a still image*. An antenna and a transmitting/receiving exchanger 11 (claimed receiver) are provided to receive an electromagnetic signal generated according to a wireless telephone system. An A/D converter 13 (claimed modifying unit) modifies the electromagnetic signal received by the antenna into a digital electronic signal *indicative of a still image*. A display device 4 alternatively displays either *a still image* from the CCD camera 10 or *a still image* from the A/D converter 13.

Thus, the present invention is directed to a digital still camera which displays *a still image*. An aspect of the present invention is that, in addition to taking a picture by using the CCD camera 10, the present invention enables to receives data indicative of a still image via a wireless network.

In this regard, the Examiner asserted that the handheld radiotelephone shown in Fig. 1 of Harris meets all of the limitations of the present invention. This assertion is respectfully disagreed with.

It should be noted that the communication system 100 shown in Fig. 1 of Harris is a wireless communication system primarily for wireless telecommunication purposes with extra capabilities. For example, as shown in Fig. 7, the communication system 100 offers a telephone mode 700, a video conferencing mode 730, a camera mode 706. Additionally, the system 100 offers a note taking mode 732, a notes mode 704 and a phonebook mode 703.

As described in column 9, lines 17-35, the telephone mode is basically allowing the user to talk with another person via a wireless network 106, and thus does not involve receiving a electromagnetic signal via the wireless network 106 and modifying the received electromagnetic signal to a digital electronic signal indicative of a still image.

In the camera mode 706, as described in column 11, lines 39-58 and column 12, lines 5-37, the image data captured by the CCD camera 188 is displayed to the display 184 but the camera mode 706 does not involve receiving a electromagnetic signal from another wireless telecommunication device 102 via the wireless network 106 and modifying the received electromagnetic signal to *a digital electronic signal indicative of a still image*, as claimed.

Likewise, the note taking mode 732, notes mode 704 and phonebook mode 703 also do not involve receiving a electromagnetic signal from another wireless telecommunication device 102 via the wireless network 106 and modifying the received electromagnetic signal to *a digital electronic signal indicative of a still image*, as claimed.

In the video conferencing mode 730, “the controller 118 displays a second user 802, with which the instant user is telephonically communicating, on the display 184” (Column 9, lines 48-49).

As commonly known, during the video conference mode, the antenna 124 receives a signal from another telecommunication device 102 via the wireless system 106 and the signal is modified by the DSP channel modem 128 to *a digital signal indicative of a moving picture image*. In other words, in the video conference mode, what is displayed on the display 184 of the communication system 100 is a moving picture image, *not a still image* as recited in claim 1.

As described above, in Harris, none of the above modes performs modifying a electromagnetic signal received via a wireless network to a digital signal indicative of a still image, as recited in claim 1. Thus, it would not be possible for Harris to teach alternatively displaying a still image from either the converting device (e.g., CCD camera) or a still image that is modified by a modifying unit (e.g., A/D converter) after being received via a wireless telephone system.

In the Office Action, the Examiner asserted that, in Harris, the DSP channel modem 128 and the controller 118 modifies the electromagnetic signal into a digital electronic signal indicative of a still image. To support this assertion, the Examiner pointed out several portions of Harris.

However, based upon Applicants’ review, these descriptive portions turned out to be not relevant to modifying the signal to a digital image indicative of a still image. For example, column 10, line 47 to column 11, line 7 of Harris is directed to *the phonebook mode*, which has no relevance to modifying the electromagnetic signal into a digital electronic signal indicative of a still image.

Column 3, line 59 to column 4, line 3 is directed to the function of the channel modem DSP 128. As commonly known, the channel modem DSP 128 demodulates and decodes the signal received via the wireless network 106 into compressed image data (e.g., moving picture image data) or other type of data (e.g., speech data or control data). However, this descriptive portion also does not teach or suggest modifying the signal via the wireless network 106 into a digital signal indicative of *a still image*.

Column 9, lines 36-65 of Harris is directed to the video conferencing mode. Since a moving picture image data is received during the video conferencing mode, this portion is also irrelevant to modifying the signal via the wireless network 106 into a digital signal indicative of *a still image*.

As described above, Harris fails to teach the claimed feature of modifying the electromagnetic signal received via a wireless network to a digital electronic signal *indicative of a still image*. Also, Harris does not use a digital electronic signal indicative of a still image during the video conference mode. Thus, it would not be possible for Harris to display a still image from the channel modem DSP 128.

Therefore, it is submitted that claim 1 is patentable over Harris. Claims 2, 4-7, 10, 18 and 19 that are dependent from claim 1 would be also patentable over Harris. Independent claim 11 including all of the limitations of claim 1 and its dependent claims 12-14 would be also patentable at least for the same reason.

Independent claim 22 recites “A digital still camera capable of telecommunication comprising: ... a memory which stores at least one specific telephone number; ... a device which allows the transmission of the electromagnetic signal containing the still image when the

telephone number designating the remote device coincides with the specific telephone number in the memory”.

In the Office Action, the Examiner alleged that the microprocessor 137 shown in Fig. 1 of Harris allows the transmission of the electronic signal containing the still image when the telephone number designating the remote coincides with the specific telephone number in the memory. This assertion is respectfully disagreed with.

Based upon Applicants’ review, Harris fails to teach or suggest determining if the telephone number designating the remote coincides with the specific telephone number in the memory. The Examiner provided with several descriptive portions of Harris to support the Examiner’s position but none of them are turned out to be relevant to determining if the telephone number designating the remote coincides with the specific telephone number in the memory.

If the Examiner wants to maintain the present position as to how Harris teaches determining if the telephone number designating the remote coincides with the specific telephone number in the memory, the Examiner is respectfully requested to be more specific in presenting the evidence.

Further, in Harris, neither the video conference mode nor the camera mode performs the transmission of the electronic signal containing *the still image*. Thus, it would not be necessary to compare a telephone number with another telephone number stored in the memory in order to transmit the electronic signal containing *the still image*. Therefore, it is submitted that claim 22 is patentable over Harris.

Accordingly, Applicants respectfully request that the rejection over claims 1, 2, 4-7, 10-14, 18, 19 and 22 be withdrawn.

***Rejections Under 35 U.S.C. §103***

In the Office Action, claim 3 has been rejected under 35 U.S.C. §103(a) for being unpatentable over Harris. This rejection is respectfully traversed.

Claim 3 is dependent from claim 1. As previously mentioned, claim 1 is believed to be patentable over Harris. No secondary reference has been introduced to cure the deficiency from the teachings of Harris. Thus, it would not have been obvious to modify the teachings of Harris to arrive at the claimed invention. Accordingly, Applicants respectfully request that the rejection over claim 3 be withdrawn.

In the Office Action, claims 8-9 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Harris in view of U. S. Patent No. 5,510,829 to Sugiyama, et al. ("Sugiyama"). This rejection is respectfully traversed.

Claims 8 and 9 are dependent from claim 1. As previously mentioned, claim 1 is patentable over Harris. Particularly, Harris fails to teach or suggest the claimed feature of modifying the electromagnetic signal received via a wireless network to a digital electronic signal *indicative of a still image*. In this regard, Sugiyama is directed to a voice and video communication device but fails to cure the deficiency from the teachings of Harris. Thus, it would not have been obvious to combine the teachings of Harris and Sugiyama to arrive at the claimed invention defined in claim 1.

Accordingly, Applicants respectfully submit that claims 8 and 9 are patentable over Harris and Sugiyama and request that the rejection over claim 8 and 9 be withdrawn.

In the Office Action, claim 15-17, 20 and 21 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Harris in view of U. S. Patent No. 5,491,507 to Umezawa, et al. (“Umezawa”). This rejection is respectfully traversed.

Claims 16 and 17 are dependent from claim 1, and claim 15 stems from independent claim 11 which contains all of the limitations of claim 1. As previously mentioned, claim 1 is believed to be patentable over Harris because Harris fails to teach or suggest the claimed feature of modifying the electromagnetic signal received via a wireless network to a digital electronic signal *indicative of a still image*.

In this regard, the secondary reference to Umezawa is directed to a video telephone equipment with a video conferencing capability, which is similar to the communication system 100 of Harris. However, Umezawa fails to cure the deficiency from the teachings of Harris.

Thus, it would not have been obvious to combine the teachings of Harris and Umezawa to arrive at the claimed invention defined in claim 1. Accordingly, Applicants respectfully submit that claims 15-17 are patentable over Harris and Sugiyama and request that the rejection over claims 15-17 be withdrawn.

Independent claim 20 recites “A digital still camera capable of telecommunication comprising: ... a memory which stores at least one specific telephone number; and a device for preventing the selecting device from selecting the digital electronic signal indicative of the still image when the telephone number designating the remote device coincides with the specific telephone number”.

In the Office Action, the Examiner admitted “Claim 20 differs from Harris in that the claim further requires a device for preventing the selecting device from selecting the digital

electronic signal indicative of a still image when the telephone number designating the remote device coincides with the specific telephone number” (Office Action, page 12).

Regarding this missing feature, the Examiner asserted “Umezawa further teaches a device (pause button 37 or button 15a) for preventing device from selecting the digital electronic signal indicative of a still image when the telephone number designating the remote device coincides with a specific telephone number (col. 8 lines 6-35; col. 9 line 40 - col. 10 line 54; col. 11 lines 2-50). Based on these two pieces of prior art, the Examiner asserted that it would have been obvious to combine the teachings of Harris and Umezawa to arrive at the invention defined in claim 20. This assertion is respectfully disagreed with.

Based upon Applicants’ review, it is submitted that Umezawa does *not* teach or suggest determining if the telephone number designating the remote device coincides with a specific number stored in the memory. The Examiner pointed out several descriptive portions of Umezawa to support his position, but it appears that none of them is relevant to determining if the telephone number designating the remote device coincides with a specific number stored in the memory.

Since none of the applied references teaches or suggest the claimed feature of determining if the telephone number designating the remote device coincides with a specific number stored in the memory, it would not have been obvious to combine the teachings of Harris and Umezawa to arrive at the invention defined in claim 20. Thus, it is submitted that claim 20 is patentable over Harris and Umezawa.

Independent claim 21 recites “A digital still camera capable of telecommunication comprising: ... a device which *selects one of the digital electronic signal indicative of the still*

*image and the electronic audio signal*; a transmitter which transmits the signal selected by the selecting device as an electromagnetic signal generated in accordance with a wireless telephone system containing the still image signal or the electronic audio signal”.

Regarding this claimed feature, the Examiner asserted that Harris teaches “a device (latch 112 and controller 118) which selects one of the digital electronic signal indicative of a still image and the electronic audio signal”. This assertion is respectfully disagreed with.

As previously mentioned, in Harris, none of the video conference, the telephone mode and the camera mode selects one of (a) the digital electronic signal indicative of the still image and (b) the electronic audio signal.

In the video conference mode, both a digital electronic signal indicative of a moving picture image and an audio (i.e., voice) signal are selected and transmitted via a wireless network. In the telephone mode, only the audio signal is selected and transmitted via a wireless network. In the camera mode, no signal is selected to be transmitted via a wireless network.

Thus, even if the communication system 100 of Harris is switching between the telephone mode and the camera mode, only the electronic audio signal is selected for transmission during the telephone mode and no signal is selected for transmission during the camera mode. Also, when the communication system 100 is switching between the telephone mode and the video conference mode, the electronic audio signal is always selected for transmission regardless of the current mode.

As such, due to its design and configuration, it is not possible for Harris to select either (a) the digital electronic signal indicative of the still image or (b) the electronic audio signal and transmit the selected signal. Applicants reviewed the descriptive portions (col. 5, line 38 - col. 7 line 15; col. 9 line 17 - col. 10 line 5; col. 10 line 33 - col. 11 line 7; col. 11 line 39 - col. 12 line

46) pointed out by the Examiner, but it appears that none of them is relevant to this claimed feature.

The secondary reference to Umezawa fails to cure this deficiency from the teachings of Harris. Thus, none of the applied reference teaches or suggests select either (a) the digital electronic signal indicative of the still image or (b) the electronic audio signal and transmit the selected signal.

Therefore, it would not have been obvious to combine the teachings of Harris and Umezawa. Accordingly, it is submitted that claim 21 is patentable over Harris and Umezawa.

#### ***Other Matters***


In this response, claim 1 has been amended to correct informalities therein. Particularly, in claim 1, the recitation of “a digital *electromagnetic* signal indicative of a still image” in lines 2-3 is amended to read “a digital *electronic* signal indicative of a still image” to be consistent with the specification (i.e., Specification, page 5, lines 20-21).

#### **CONCLUSION**

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete response has been made to the outstanding Office Action and, as such, claims 1-22 are in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

  
Hae-Chan Park  
Reg. No. 50,114

Date: March 10, 2003

McGuire Woods LLP  
1750 Tysons Boulevard  
Suite 1800  
McLean, VA 22102-4215  
Tel: 703-712-5365  
Fax: 703-712-5280  
HCP:WSC/kbs